

CLAIMS

I CLAIM:

1. A chain saw comprising a motor inside a housing, a cutter providing chain saw chain comprised of links which include chain link mating elements, and an elongated support extending outward from inside said housing, said motor and chain saw chain being functionally interconnected inside said housing such that operation of said motor applies motion producing force to said chain saw chain; in the outer surface of said elongated support there being present a continuous chain channel guide into which said chain link mating elements slideably insert, such that during normal operation said chain link mating elements slide essentially freely through said continuous chain channel guide when forced to do so by operation of said motor, said elongated support being slit in a longitudinal direction as said chain saw is viewed in side elevation, such that the upper and lower portions above and below the longitudinal slit can be separated from one another at at least one location along the longitudinal extent thereof, said longitudinal slit enabling separation of the upper and lower portions of said elongated support, thereby the causing of a "stretching" of the chain saw chain, such that when said stretching is appropriate, the chain saw chain is properly tensioned to facilitate motion of said chain saw chain.

2. A chain saw as in Claim 1, in which said elongated support is caused to be in an offset normally open position, from one side of said longitudinal slit to the other, unless a user causes it to be closed by operation of an a control means.

3. A chain saw as in Claim 1, in which said elongated support is caused to be in a normally closed position, from one side of said longitudinal slit to the other, unless a user causes it to

be separated by operation of an a control means.

4. A chain saw as in Claim 2, in which the control means is external to the longitudinal slit.

5. A chain saw as in Claim 2, in which the control means is internal to the longitudinal slit.

6. A chain saw as in Claim 3, in which the control means is external to the longitudinal slit.

7. A chain saw as in Claim 3, in which the control means is internal to the longitudinal slit.

8. A chain saw comprising a housing and an elongated support extending outward from inside said housing, said elongated support having a longitudinally oriented slit therein as said chain saw is viewed in side elevation, said elongated slit enabling the upper and lower portions above and below the longitudinal slit to be separated from one another at at least one location along the longitudinal extent thereof.

9. A method operating a chain including causing motion of a chain saw chain, comprising the steps of:

a. providing a chain saw comprising a motor inside a housing, a cutter providing chain saw chain comprised of links which include chain link mating elements, and an elongated support extending outward from inside said housing, said motor and chain saw chain being functionally interconnected inside said housing such that operation of said motor applies motion producing force to said chain saw chain; in the outer surface of said elongated support there being present a continuous chain channel guide into which said chain link mating elements slideably insert, such that during normal operation said chain link mating elements slide

essentially freely through said continuous chain channel guide when forced to do so by operation of said motor, said continuous chain channel elongated support having a longitudinally oriented longitudinal slit therein as said chain saw is viewed in side elevation, such that the upper and lower portions above and below the longitudinal can be separated from one another at at least one location along the longitudinal extent thereof, said longitudinal slit enabling separation of the upper and lower portions of said elongated support, thereby the causing of a "stretching" of the chain saw chain, such that when said stretching is appropriate, the chain saw chain is properly tensioned to facilitate motion of said chain saw chain;

- b. causing said upper and lower portions of said elongated support to be appropriately separated from one another, such that slideability of said chain saw blade in said continuous chain channel guide is optimized;
- c. causing said motor to force said chain saw chain to slide essentially freely through said continuous chain channel guide by application of force thereto by said motor.

10. A method operating a chain including causing motion of a chain saw chain and the stopping thereof, comprising the steps of:

- a. providing a chain saw comprising a motor inside a housing, a cutter providing chain saw chain comprised of links which include chain link mating elements, and an elongated support extending outward from inside said housing, said motor and chain saw chain being functionally interconnected inside said housing such that operation of said motor applies motion producing force to said chain saw chain; in the outer surface of said elongated support there being present a continuous chain channel guide into which said chain link mating elements slideably insert, such that

during normal operation said chain link mating elements slide essentially freely through said continuous chain channel guide when forced to do so by operation of said motor;

· said chain saw further comprising, in the elongated support, a slit in a longitudinal direction as said chain saw is viewed in side elevation, such that the upper and lower portions above and below the longitudinal slit can be separated from one another at at least one location along the longitudinal extent thereof, said longitudinal slit enabling separation of the upper and lower portions of said elongated support, thereby the causing of a "stretching" of the chain saw chain, such that when said stretching is appropriate, the chain saw chain is properly tensioned to facilitate motion of said chain saw chain;

b. causing said motor to force said chain saw chain to slide essentially freely through said continuous chain channel guide by application of force thereto by said motor;

c. adjusting the distance between the upper and lower portions above and below the longitudinal slit to brake the chain saw chain motion.

11. A chain saw comprising a motor inside a housing, a cutter providing chain saw chain comprised of links which include chain link mating elements, and an elongated support extending outward from inside said housing, said motor and chain saw chain being functionally interconnected inside said housing such that operation of said motor applies motion producing force to said chain saw chain; in the outer surface of said elongated support there being present a continuous chain channel guide into which said chain link mating elements slideably insert, such that during normal operation said chain link mating elements slide essentially freely through said continuous chain channel guide when forced to do so by operation of said motor, said continuous

chain channel guide having a lateral slit present therein which allows effecting an offset of said continuous chain channel guide from one side of said lateral slit to the other, and/or from the top to bottom thereof said offset, when present, serving to impede the slideability of chain link mating elements across said lateral slit;

the improvement being that said elongated support is slit in a longitudinal direction as said chain saw is viewed in side elevation, such that the upper and lower portions above and below the longitudinal slit can be separated from one another, said longitudinal slit enabling separation of the upper and lower portions of said elongated support at at least one location along the longitudinal extent thereof, thereby the causing of a "stretching" of the chain saw chain, such that when said stretching is appropriate, the chain saw chain is properly tensioned to facilitate motion of said chain saw chain.

12. A chain saw as in Claim 11, in which said continuous chain channel guide is caused to be in an offset position, from one side of said lateral slit to the other, unless a user causes it to be aligned by operation of an a continuous chain channel guide alignment means, thereby providing a chain saw which impedes the slideability of chain link mating elements across said lateral slit until desired by a user.

13. A chain saw as in Claim 12, in which the continuous chain channel guide alignment means is a dumbbell shaped element slideably mounted in the elongated support, such that in use said dumbbell shaped element causes alignment of the continuous chain channel guide means from one side of the lateral slit to the other, when caused to be located at said lateral slit.

14. A chain saw as in Claim 11, which further comprises a second

lateral slit said continuous chain channel guide which allows effecting an offset of said continuous chain channel guide from one side of said second lateral slit to the other.

15. A chain saw as in Claim 14, in which said continuous chain channel guide is caused to be in an offset position, from one side of said second lateral slit to the other, unless a user causes it to be aligned by operation of an a second continuous chain channel guide alignment means, thereby providing a chain saw which impedes the slideability of chain link mating elements across said lateral slit until desired by a user.

16. A chain saw as in Claim 15, in which the continuous chain channel guide alignment means is a second dumbbell shaped element slideably mounted in the elongated support, such that in use said second dumbbell shaped element causes alignment of the continuous chain channel guide means from one side of the lateral slit to the other, when caused to be located at said lateral slit.

17. A chain saw as in Claim 12, in which the continuous chain channel guide alignment means is half-a-dumbbell shaped element slideably mounted in the elongated support, such that in use said half-a-dumbbell shaped element causes alignment of the continuous chain channel guide means from one side of the lateral slit to the other, when caused to be located at said lateral slit.

18. A chain saw as in Claim 15, in which the continuous chain channel guide alignment means is a second half-a-dumbbell shaped element slideably mounted in the elongated support, such that in use said second half-a-dumbbell shaped element causes alignment of the continuous chain channel guide means from one side of the lateral slit to the other, when caused to be located at said lateral slit.

19. A chain saw comprising a motor inside a housing, a cutter providing chain saw chain comprised of links which include chain link mating elements, and an elongated support extending outward from inside said housing, said motor and chain saw chain being functionally interconnected inside said housing such that operation of said motor applies motion producing force to said chain saw chain; in the outer surface of said elongated support there being present a continuous chain channel guide into which said chain link mating elements slideably insert, such that during normal operation said chain link mating elements slide essentially freely through said continuous chain channel guide when forced to do so by operation of said motor, said continuous chain channel guide having means present therein which allows effecting an impeded chain channel guide, said means which allows effecting an impeded chain channel guide serving to, when operated, impede the slideability of a chain saw chain in said continuous chain channel guide;

the improvement being that said elongated support is slit in a longitudinal direction as said chain saw is viewed viewed in side elevation, such that the upper and lower portions above and below the longitudinal slit can be separated from one another, said longitudinal slit enabling separation of the upper and lower portions of said elongated support at at least one location along the longitudinal extent thereof, thereby the causing of a "stretching" of the chain saw chain, such that when said stretching is appropriate, the chain saw chain is properly tensioned to facilitate motion of said chain saw chain.

20. A chain saw as in Claim 19 wherein said means which allows effecting an impeded chain channel guide comprises at least one lateral slit laterally thereacross.

21. A chain saw as in Claim 19 wherein said means which allows effecting an impeded chain channel guide comprises at least one

collapsible region.

22. A chain saw as in Claim 19 wherein said means which allows effecting an impeded chain channel guide comprises at least one insertional element which is entered thereinto through a means for entering an insertional element.

23. A method operating a chain including causing motion of a chain saw chain and the stopping thereof, comprising the steps of:

a. providing a chain saw comprising a motor inside a housing, a cutter providing chain saw chain comprised of links which include chain link mating elements, and an elongated support extending outward from inside said housing, said motor and chain saw chain being functionally interconnected inside said housing such that operation of said motor applies motion producing force to said chain saw chain; in the outer surface of said elongated support there being present a continuous chain channel guide into which said chain link mating elements slideably insert, such that during normal operation said chain link mating elements slide essentially freely through said continuous chain channel guide when forced to do so by operation of said motor, said continuous chain channel guide having means present therein which allows effecting an impeded chain channel guide, said means which allows effecting an impeded chain channel guide, serving to, when operated, impede the slideability of chain link mating elements thereacross;

said chain saw further comprising, in the elongated support, a slit in a longitudinal direction as said chain saw is viewed in side elevation, such that the upper and lower portions above and below the longitudinal slit can be separated from one another at at least one location along the longitudinal extent thereof, said longitudinal slit enabling separation of the upper and lower

portions of said elongated support, thereby the causing of a "stretching" of the chain saw chain, such that when said stretching is appropriate, the chain saw chain is properly tensioned to facilitate motion of said chain saw chain;

b. adjusting the distance between the upper and lower portions above and below the longitudinal slit to provide desired tensioning in the chain saw chain;

c. causing an unimpeded continuous chain channel guide from one side of said means present therein which allows effecting an impeded chain channel guide from one side thereof to the other, and causing said motor to force said chain saw chain to slide essentially freely through said continuous chain channel guide by application of force thereto by said motor;

d. causing said means which allows effecting an impeded chain channel guide, to be operated and effect impedance of said chain channel guide, said means which allows effecting an impeded chain channel guide serving to impede the slideability of said chain saw chain in said continuous chain channel guide.

24. A method operating a chain including causing motion of a chain saw chain and the stopping thereof as in Claim 23, wherein the step of providing a chain saw with a means present therein which allows effecting an impeded chain channel guide involves providing a continuous chain channel guide into which is cut a slit laterally thereacross.

25. A method operating a chain including causing motion of a chain saw chain and the stopping thereof as in Claim 23, wherein the step of providing a chain saw with a means present therein which allows effecting an impeded chain channel guide involves providing a continuous chain channel guide in which is present a means for collapsing thereof.

26. A method operating a chain including causing motion of a chain saw chain and the stopping thereof as in Claim 23, wherein the step of providing a chain saw with a means present therein which allows effecting an impeded chain channel guide, involves providing a continuous chain channel guide in which is present a means for entering an insertional element thereinto.

27. A chain saw comprising a motor inside a housing, a cutter providing chain saw chain comprised of links which include chain link mating elements, and an elongated support extending outward from inside said housing, said motor and chain saw chain being functionally interconnected inside said housing such that operation of said motor applies motion producing force to said chain saw chain; in the outer surface of said elongated support there being present a continuous chain channel guide into which said chain link mating elements slideably insert, such that during normal operation said chain link mating elements slide essentially freely through said continuous chain channel guide when forced to do so by operation of said motor, said continuous chain channel guide having a lateral slit present therein which can be caused to effect an offset of said continuous chain channel guide from, as viewed in side elevation, the top of said lateral slit to the bottom thereof and/or, as viewed from the top, from one side of said lateral slit to the other side thereof.